

**NOT FOR PUBLICATION**

**UNITED STATES DISTRICT COURT  
DISTRICT OF NEW JERSEY**

THE GREEN PET SHOP ENTERPRISES,  
LLC,

Plaintiff,

v.

COMFORT REVOLUTION, LLC,

Defendant.

Civil Action No. 20-2130 (MAS) (TJB)

**MEMORANDUM OPINION**

**SHIPP, District Judge**

This matter comes before the Court for the construction of claims in Plaintiff The Green Pet Shop Enterprises, LLC’s (“Plaintiff”) patent, U.S. Patent No. 8,720,218 (“’218 Patent”). (ECF No. 1-1.) The Court, having considered the parties’ submissions, and having conducted a Markman Hearing,<sup>1</sup> provides its claim constructions as set forth below.

**I. BACKGROUND**

Plaintiff brought a civil action against Defendant Comfort Revolution, LLC (“Defendant”) for infringement of the ’218 Patent. (*See generally* Compl., ECF No. 1.) Defendant is the maker, importer, and/or seller of the Therapedic Cooling Gel & Memory Foam Pillow, the accused product in this action. (*Id.* at 3.)

The ’218 Patent, entitled “Pressure Activated Recharging Cooling Platform,” was filed on April 14, 2010, and “is directed to pads that cool objects (including humans and pets) using both

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<sup>1</sup> *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370 (1996).

the weight and body temperature of the object.” (Pl.’s Opening Br. 6, ECF No. 44; *See ’218 Patent.*) The ’218 Patent contains twenty claims, nine of which are independent. (’218 Patent col. 5:43–8:57.) The terms at issue in the instant matter pertain to claims 15 and 16, which both cover “[a] cooling platform for cooling an object[.]” (*Id.* at col. 7:12–38.)

## II. LEGAL STANDARD

### A. **Claim Construction**

Claim construction is a threshold issue the Court must address before analyzing infringement and/or invalidity. Claim construction is a question of law that the Court decides, not a jury. *See Markman*, 517 U.S. at 391. “It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (internal quotation marks and citation omitted).

“[W]ords of a claim ‘are generally given their ordinary and customary meaning.’” *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question [(the ‘POSA’)] at the time of the invention, *i.e.*, as of the effective filing date of the patent application.” *Id.* at 1313 (citations omitted). A POSA is a hypothetical person who “is deemed to [have] read the claim term not only in the context of the particular claim in which the disputed term appears, but [also] in the context of the entire patent, including the specification.” *Id.*

“Claim construction begins with the intrinsic evidence of the patent—the claims, the specification, and the prosecution history—and may require consultation of extrinsic evidence to understand the state of the art during the relevant time period.” *Horizon Pharma Ir. Ltd. v. Actavis Lab’ys, UT, Inc.*, No. 14-7992, 2016 WL 4408990, at \*2 (D.N.J. Aug. 17, 2016) (citing *Teva*

*Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015)). “[T]he best source for understanding a technical term is the specification from which it arose, informed, as needed, by the prosecution history.” *Phillips*, 415 F.3d at 1315 (internal quotation marks and citation omitted). “[P]rior art cited in a patent or cited in the prosecution history of the patent constitutes intrinsic evidence.” *V-Formation, Inc. v. Benetton Grp. SpA*, 401 F.3d 1307, 1311 (Fed. Cir. 2005) (citations omitted).

Courts may also consider extrinsic evidence; however, that evidence “is less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Phillips*, 415 F.3d at 1317 (internal quotation marks and citation omitted). “[I]f the meaning of the claim limitation is apparent from the intrinsic evidence alone, it is improper to rely on extrinsic evidence other than that used to ascertain the ordinary meaning of the claim limitation.” *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Grp.*, 262 F.3d 1258, 1268–69 (Fed. Cir. 2001) (citation omitted). Extrinsic evidence may not be used to vary or contradict the claim language; however, it “may be helpful to explain scientific principles, the meaning of technical terms, and terms of art that appear in the patent and prosecution history.” *Markman*, 52 F.3d at 980. Finally, extrinsic evidence “ensure[s] that the court’s understanding of the technical aspects of the patent is consistent with that of a [POSA].” *Phillips*, 415 F.3d at 1318.

## B. Indefiniteness

“[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). “[D]efiniteness is measured from the viewpoint of a [POSA] . . . at the time the patent was filed.” *Id.* at 908 (citation omitted) (emphasis omitted). “[A] patent must be precise enough to afford clear notice of what is claimed, thereby ‘appris[ing] the public of what is still

open to them.”” *Id.* at 909 (alteration in original) (citation omitted). “[T]he definiteness requirement[, however,] must take into account the inherent limitations of language” and a “modicum of uncertainty” is permitted due to those limitations. *Id.* (citations omitted). A patent is presumptively valid, and to demonstrate indefiniteness, an allegedly infringing party must show “by clear and convincing evidence that a skilled artisan could not discern the boundaries of the claim. . . .” *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1249–50 (Fed. Cir. 2008); *N. Am. Vaccine, Inc. v. Am. Cyanamid Co.*, 7 F.3d 1571, 1579 (Fed. Cir. 1993).

### **III. DISCUSSION**

For the purposes of this claim construction, the Court must resolve: (1) the definition of a POSA in the context of the ’218 Patent; (2) which terms to construe; and (3) the construction of those terms. The Court will address each of these in turn.

#### **A. POSA**

Before the Court can review the claims, it “must establish the level of skill that a POSA possessed at the time of the invention.” *Supernus Pharm., Inc. v. Actavis, Inc.*, No. 14-6102, 2016 WL 901837, at \*2 (D.N.J. Mar. 9, 2016) (citing *AllVoice Computing PLC v. Nuance Commc’ns, Inc.*, 504 F.3d 1236, 1240 (Fed. Cir. 2007)). Even if the definition adopted does not necessarily affect construction of the disputed claim terms, this Court will define the POSA in the context of the ’218 Patent for the purposes of the present matter. *See Eli Lilly & Co. v. Teva Parenteral Meds., Inc.*, No. 10-1376, 2012 WL 2358102, at \*4 n.3 (S.D. Ind. June 20, 2012) (finding that determining a POSA was necessary to resolve the dispute even though both parties stated that the issue was not dispositive with respect to claim construction).

The parties here dispute a POSA’s specificity of education and years of experience. Plaintiff defined a POSA as someone who “has (1) at least a bachelor of science or equivalent

degree; and (2) at least two years of working experience in the field of temperature regulation of a process or apparatus.” (Pl.’s Opening Br. 9.) In contrast, Defendant defined a POSA as someone who “would have at least a [b]achelor’s degree in the field of [m]echanical or [c]hemical [e]ngineering and [three] years of experience with heat transfer.” (Hodes Decl. 15–16, ECF No. 45-4.)

The Federal Circuit has made clear that the Court may consider the following factors in determining this issue: “(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of active workers in the field.” *Env’t Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 696 (Fed. Cir. 1983) (citation omitted). “Not all such factors may be present in every case and one or more of these or other factors may predominate in a particular case.” *Id.* at 696–97.

The parties offer minimal support for their definitions, and therefore, the Court is unable to fully evaluate the relevant factors to make its decision.<sup>2</sup> Defendant provides a more specific definition of a POSA with more narrow constraints. The invention in this case is not highly technical or complex and Defendant has not provided justification for why a POSA would be required to have such narrow and specific requirements. This Court, therefore, does not believe

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<sup>2</sup> Importantly, however, both parties have proposed definitions of POSA that exclude the inventor. In general, “[the] starting point [for defining a POSA] is based on the well-settled understanding that inventors are typically persons skilled in the field of the invention[.]” *Phillips*, 415 F.3d at 1313. “It should be clear[, however,] that [the] hypothetical person is not the inventor, but an imaginary being possessing ‘ordinary skill in the art’ created by Congress to provide a standard of patentability[.]” *Kimberly-Clark Corp. v. Johnson & Johnson*, 745 F.2d 1437, 1454 (Fed. Cir. 1984). This is because “[r]ealistically, courts have never judged patentability by what the real inventor/applicant/patentee could or would do [because] [r]eal inventors, as a class, vary in their capacities from ignorant geniuses to Nobel laureates[.]” *Id.*

that Defendant's definition of a POSA is necessary here. Thus, the Court adopts Plaintiff's definition of a POSA for the purposes of this claim construction matter.

#### **B. Which Terms Should Be Interpreted**

The parties have "taken quite a different view as to how to approach [this] claim construction" with respect to identifying terms needing construction in claims 15 and 16 of the '218 Patent. (Markman Hr'g Tr. 4:25–5:1; *see also* Joint Claim Construction Statement 7–16, ECF No. 42.) In general, Plaintiff asserts that none of the terms contained in the '218 Patent require claim construction. (*See generally* Pl.'s Opening Br.) Alternatively, Plaintiff has identified for construction short terms ranging from only one to four words in length while Defendant has identified full phrases.<sup>3</sup> (*See* Joint Claim Construction Statement 7–16.) To determine which approach to take, this Court turns to the guiding principles of claim construction.

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<sup>3</sup> Defendant offers the following phrases for construction:

[(1)] the temperature regulation layer having an angled segment formed by a top side and a bottom side at a predefined distance, and channels, wherein the channels form sides by contacting the top side with the bottom side[,]

[(2)] the temperature regulation layer having a plurality of angled segments, wherein angled segments within a sealed perimeter of the temperature regulation layer are formed by a top side and a bottom side at a predefined distance, and channels, wherein the channels substantially form sides by contacting the top side with the bottom side at a distance lesser than the predefined distance[,]

[(3)] a pressure activated recharging cooling composition within the temperature regulation layer[, and]

[(4)] the pressure activated recharging cooling composition endothermically activated and endothermically deactivated upon the application and release of pressure, respectively[.]

(*See generally* Joint Claim Construction Statement.)

Claim construction rulings “are legal issues central to most patent cases.” *Sulzer Textil A.G. v. Picanol N.V.*, 358 F.3d 1356, 1366 (Fed. Cir. 2004). “The construction of claims is simply a way of elaborating the normally terse claim language in order to understand and explain, but not to change, the scope of the claims.” *Terlep v. Brinkmann Corp.*, 418 F.3d 1379, 1382 (Fed. Cir. 2005) (internal quotation marks omitted) (quoting *Embrex, Inc. v. Serv. Eng’g Corp.*, 216 F.3d 1343, 1347 (Fed. Cir. 2000)). It “is a matter of resolution of disputed meanings and technical scope, to clarify and[,] when necessary[,] to explain what the patentee covered by the claims[.]” *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). It is not, however, “an obligatory exercise in redundancy.” *Id.*

A court “normally will need to provide the jury in a patent case with instructions adequate to ensure that the jury fully understands” the claim terminology and patent scope. *Sulzer Textil A.G.*, 358 F.3d at 1366. In approaching the claim construction process, courts “[can sometimes be] reluctant to adopt [a] construction, which, in the Court’s view, is merely a verbose paraphrasing of the claim language that otherwise offers little to assist [a POSA or a member of the jury] in understanding the claims.” *Am. Pat. Dev. Corp. v. Movielink, LLC*, 604 F. Supp. 2d 704, 716 (D. Del. 2009) (refusing to adopt a construction that it deemed “verbose paraphrasing”). This Court shares that reluctance.

This Court, therefore, will only construe the terms “that [it has determined] are in controversy, and [will] only [do so] to the extent necessary to resolve the controversy.” *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999). Because of this general approach, the Court need not interpret the full, lengthy phrases offered by Defendant for

construction.<sup>4</sup> Instead, it will look to the parties' briefs and arguments to determine which specific terms are really in dispute.<sup>5</sup> Defendant's proposed interpretation of entire phrases include the following key disputed terms: "temperature regulation layer," "top side," "bottom side," "predefined distance,"<sup>6</sup> "contacting," "pressure activated," "recharging,"<sup>7</sup> "endothermically activated," and "endothermically deactivated." The Court will consider each of these in turn.

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<sup>4</sup> Defendant argues in favor of construing entire phrases because this approach "[does not] isolate terms and pull them outside the context of the patent and look at them in a vacuum." (Markman Hrg Tr. 25:24–25.) This argument, however, fails to account for the requirement that "the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of [disputed] terms." *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003). Therefore, the Court need not construe the long phrases to make sure that the context of the terms is accounted for. Further, Defendant's approach would require the same term, such as "temperature regulation layer," to be interpreted multiple times. Under the notion that "claim terms are normally used consistently throughout the patent," this would be redundant. *Phillips*, 415 F.3d at 1314. As Plaintiff also argued, Defendant's approach would not provide clarity for members of a jury and the constructions provided would be "cumbersome and unclear." *See, e.g., Integrated Prod. Servs. v. Prod. Control Servs.*, No. 11-1034, 2013 WL 4647316, at \*11 n.9 (S.D. Tex. Apr. 17, 2013) (determining that the proposed phrase "downwardly facing cross-sectional area or surface area" should be construed as two separate terms, "downwardly facing cross-sectional area" and "surface area," because "the including of the word 'or' in the phrase . . . made the phrase cumbersome and unclear"). As a result, the Court finds that individual terms, rather than lengthy phrases, should be construed here.

<sup>5</sup> This approach was also taken by another court determining claim construction of the '218 Patent. In *Green Pet Shop Enterprises, LLC v. Maze Innovations, Inc.*, Defendant Maze Innovations presented the phrase "a pressure activated recharging cooling composition" for construction in its entirety. No. 15 C 1138, 2016 WL 7451629, at \*2 (N.D. Ill. Dec. 28, 2016). The court, however, determined that "[the] only real dispute [was] over the meaning of the word 'recharging.'" *Id.* It therefore elected only to construe that single word because other "terms already included in the claim itself . . . [do] not need to [be] interpret[ed] . . . to resolve the dispute." *Id.*

<sup>6</sup> The parties agree that "predefined distance" should be construed as "established distance." (Joint Claim Construction Statement 8–10.) This Court agrees with this construction. Therefore, this term will not be further discussed.

<sup>7</sup> The parties agree that "recharging" should be construed as "reversible." (Joint Claim Construction Statement 12.) This Court agrees with this construction. Therefore, this term will not be further discussed.

### C. Disputed Claim Terms/Phrases

#### 1. “a temperature regulation layer”

The parties differ in their proposed constructions of the term “a temperature regulation layer” in claims 15 and 16 of the ’218 Patent. (’218 Patent col. 7:14, 7:26.) Plaintiff contends that this term need not be construed “because a jury can understand the meaning of [the term].” (Pl.’s Opening Br. 13.) Alternatively, it suggests that the Court should adopt the “[p]lain and ordinary meaning, which is the portion of the cooling platform adapted to hold the cooling composition and allow the transfer of heat between the composition and the object.” (*Id.* at 12–13.) In contrast, Defendant contends that the proper construction of this term is “a layer adapted to control or maintain the rate of temperature change of the cooling platform.” (Def.’s Opening Br. 16 (emphasis omitted), ECF No. 45.)

Plaintiff argues that its proposed construction is based on the specification’s support in two instances: (1) “[t]he temperature regulation layer 110 is adapted to hold a composition 110A . . . and provides temperature regulation to the cooling platform 100” (’218 Patent col. 2:18–20); and (2) “[d]epending on the composition 110A used, the temperature regulation layer transfers heat from the object” (*Id.* at col. 4:50–51). (*See* Markman Hr’g Tr. 7.) Plaintiff’s construction relies on the context in which the term is used in the specification, specifically “the temperature regulation layer in context of endothermic activation or deactivation[,] or absorbing and releasing heat.” (Markman Hr’g Tr. 7:21–23.) Plaintiff further notes that it “thought it was appropriate to rely on the specification which speaks about transferring heat from the object.” (*Id.* at 7:24–8:1.)

Defendant, in support of its construction, points to the language of the ’218 Patent itself, which states “[t]he invention related to temperature[-]controlled platforms[.]” (’218 Patent col. 1:7; *see* Markman Hr’g Tr. 29:6–8.) As Defendant suggests with its proposed construction, a key

element of the invention is the ability to control the temperature, or the changing of the temperature, of the cooling pad. (*See* Markman Hr'g Tr. 29:6–17.) The specification, however, only “goes on to say, the temperature regulation layer ‘provides temperature regulation to the cooling platform.’” (*Id.* at 29:12–14 (quoting '218 Patent col. 2:19–20).) As Defendant notes, therefore, the meaning of the claim term turns on the meaning of “regulate.” (*Id.* at 28:20–22.) Defendant further argues for its construction, asserting that “[t]here’s not a lot of guidance in the [specification to help determine the meaning of ‘regulate’], but . . . [looking to extrinsic] evidence means that [the term ‘regulate’] means to control or maintain.” (*Id.* at Tr. 28:22–25; *see also* Def.’s Opening Br. 17 (citing the Merriam-Webster definition of the term “regulate”).)

In further opposition to Plaintiff’s proposed construction, Defendant argues that “[a]llowing” an event to occur is not the equivalent of regulating such an event. The passive ‘allow’ is not equivalent to the active ‘regulate.’” (Def.’s Resp. Br. 3 (emphasis added), ECF No. 46.) This Court agrees. Plaintiff’s proposed construction incorporating the word “allow” attempts to impermissibly broaden the scope of the claim’s coverage. In addition, Plaintiff does not adequately support its proposed construction with intrinsic or extrinsic evidence either. The Court, therefore, turns to Defendant’s proposed construction to see if it is appropriate to adopt here.

Defendant’s proposed construction improperly relies on extrinsic evidence and would narrow the scope of the claims’ coverage. Plaintiff correctly notes that Defendant’s construction relies on a dictionary definition selected by Defendant’s expert. (Pl.’s Resp. Br. 4, ECF No. 47.) To select this definition, the expert relied only on extrinsic evidence. (Def.’s Opening Br., Ex. D, ¶¶ 42–44, ECF No. 45-4.) Namely, the expert relied on his own experience and deposition testimony of the inventor. (*Id.*) Defendant fails to cite any intrinsic evidence that suggests control or maintenance of the *rate* of temperature *change* of the cooling platform. (Def.’s Opening Br. 16–

18; Def.’s Resp. Br. 2–5.) In situations where “the intrinsic evidence alone will resolve any ambiguity” it is improper to rely on extrinsic evidence. *Vitronics*, 90 F.3d at 1583. Defendant has failed to show ambiguity in the intrinsic evidence as to the meaning of the term. Thus, it is improper to rely on extrinsic evidence. By relying on extrinsic evidence, Defendant has introduced a limitation requiring control or maintenance of the *rate* of temperature *change*, which would narrow the scope of the claims. Further, the usage of the term in the specification is not technical, but rather reflects the common usage. This Court, therefore, finds that the term “a temperature regulation layer” in the context of the written description is understandable to a jury and need not be construed.

## 2. “top side” and “bottom side”<sup>8</sup>

The terms “top side” and “bottom side” are used to refer to the sides which form a sealed perimeter of the angled segments. (’218 Patent col. 4:15–19.) Plaintiff argues that “the terms ‘top side’ and ‘bottom side’ are within the ken of an average jury of English speakers” and thus do not require this Court’s construction. (Pl.’s Resp. Br. 7.) This Court agrees.

Defendant, in its proposed construction, replaced the terms “top side” and “bottom side” with “upper part” and “lower part,” respectively. (See Joint Claim Construction Statement 8–10.) In opposition to Plaintiff’s position that the terms need not be construed, Defendant suggests that the “salient issue [of] whether the ‘top side’ and ‘bottom side’ are opposing, distinct sides of the

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<sup>8</sup> The terms “top side” and “bottom side” were originally identified by Plaintiff for construction. (See Joint Claim Construction Statement 8–10.) The proposed constructions were “top surface of an angled segment” and “bottom surface of an angled segment,” respectively. (*Id.*) Defendant objected to such constructions, arguing that “Plaintiff [was] attempting to improperly broaden the claim language such that the temperature regulation layer is not required to have two opposing sides but merely two surfaces of one side.” (Def.’s Opening Br. 19.) As a result, in its responsive brief, Plaintiff expressed its desire to revert back to the original claim language, thus requesting the Court not to construe those terms at all. (Pl.’s Resp. Br. 7.) The Court, however, finds that these terms still need to be addressed based on the arguments raised by Defendant.

temperature regulation layer between which the cooling composition is located” goes unaddressed without construction here. (Def.’s Resp. Br. 5.) Utilizing the word “part,” in conjunction with either “upper” or “lower,” Defendant argues, indicates the existence of a cooling composition which is located between the sides of the temperature regulation layer. (*See id.* at 6.)

This Court finds, however, that the terms “top side” and “bottom side” in context are easy for a jury to understand and therefore do not need to be construed. Further, this Court agrees that Defendant’s proposal is “substitution, not construction. . . .” (Pl.’s Opening Br. 17.) Reading the terms “top side” and “bottom side” in context indicates that the two sides are opposing and contain a cooling composition that is located between the two sides. *See ACTV*, 346 F.3d at 1088 (“the context of the surrounding words of the claim . . . must be considered in [construing a claim term] . . . .”).

### 3. “contacting”

In its claim construction for phrases found in claims 15 and 16 of the ’218 Patent, Defendant replaced the term “contacting” with “touching.” (*See* Joint Claim Construction Statement 8–10.) In doing so, Defendant argues that, in the context of the claim language using the word “contacting” and the figures of the ’218 Patent, it is unclear if the top and bottom sides have to “touch” to form the claimed channels.<sup>9</sup> (Def.’s Resp. Br. 10.) By proposing the construction of “contacting” as “touching,” Defendant attempts to remedy that confusion. This Court agrees

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<sup>9</sup> Defendant also argues that in the context of the claim 16 language, “wherein the channels substantially form sides by contacting the top side with the bottom side at a distance lesser than the predefined distance[,]” the clarification that the sides are “touching” is needed, or such language could be indefinite. (*See* Joint Claim Construction Statement 10.) The reasoning is grounded in the notion that if the “distance lesser than the predefined distance” was anything but zero, the sides would not be “touching.” (Def.’s Resp. Br. 10.) Therefore, “[a]ny other construction [without clarifying that the sides are ‘touching’] renders the claim indefinite because the top and bottom side at the channels cannot both be in contact but also [be] spaced apart at a distance greater than zero.” (*Id.* (citing *Nautilus, Inc.*, 572 U.S. at 901, 909).)

that such construction is appropriate in this instance. It ensures that the claim language is not rendered indefinite, and it clarifies for the jury what is meant by the term “contact.”

**4. “pressure activated,” “endothermically activated,” and “endothermically deactivated”**

This is not the first time a court has been called on to determine the meaning of the terms “pressure activated,” “endothermically activated,” and “endothermically deactivated.” In fact, three other claim construction decisions have been rendered where at least two of these terms were addressed.<sup>10</sup> While not required to follow the prior decisions, this Court finds them persuasive authority here and will therefore draw as appropriate on those prior decisions for the present claim construction analysis. *See European Home Design*, 2019 WL 1172069, at \*4 (citing *Maze Innovations*, 2016 WL 7451629); *see also Teva Pharmas. USA, Inc.*, 135 S. Ct. at 839–40 (“[P]rior cases . . . sometimes will serve as persuasive authority.”).

**(a) “pressure activated”**

Plaintiff has presented its construction of the term “pressure activated” as “activated, at least in part, by pressure.” (Joint Claim Construction Statement 12.) Plaintiff offers its proposed construction “simply to avoid any confusion [about the fact] that . . . the pad can also be activated in theory by . . . inputs [other] than pressure. But . . . pressure must be at least a component of the activation.” (Markman Hr’g Tr. 10:18–21.) Plaintiff also finds support for this construction in the language of the ’218 Patent itself. Specifically, the specification states that “the composition can

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<sup>10</sup> *See Maze Innovations*, 2016 WL 7451629, at \*5–6 (determining the meaning of “endothermically activated” and “endothermically deactivated”); *Green Pet Shop Enters., LLC v. European Home Design, LLC*, 17-6238, 2019 WL 1172069, at \*4–5 (S.D.N.Y. Mar. 13, 2019) (construing “endothermically activated,” “endothermically deactivated,” and “pressure activated”); *Green Pet Shop Enters., LLC v. Fine Promotions, LLC*, No. 18-4526, 2019 WL 6206577, at \*14–18 (E.D.N.Y. Sept. 25, 2019) (providing a construction for “pressure activated,” “endothermically activated,” and “endothermically deactivated”).

be activated by a wide variety of means, e.g., the addition of water. . . . In another embodiment, the composition . . . can be activated by pressure . . . ." ('218 Patent col. 3:13–18.)

In contrast, Defendant, as part of its lengthy proposed phrase construction, argues that the term requires a chemical reaction. (See Def.'s Opening Br. 29–35). Defendant does not dispute whether the composition can be activated by some mechanism other than pressure, but focuses on the meaning of "activated." (Def.'s Resp. Br. 11.) In support of its position, Defendant relies on Plaintiff's prosecution history, where communications were made to a patent examiner distinguishing the present invention from prior art. (See Markman Hr'g Tr. 36:16–37:25.) Defendant points to Plaintiff's statements that the prior art does not undergo a reversible chemical reaction driven by the application and release of pressure. (Def.'s Opening Br. 32–33 (citing Sept. 9, 2013 Response to Office Action 47, ECF No. 45-9).)

Importantly, however, "the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of [disputed] terms." *ACTV*, 346 F.3d at 1088. As Plaintiff argues, "the thing that is activated by pressure is the cooling composition[] . . . ." (Pl.'s Resp. Br. 9.) The disputed claims themselves further clarify the activation of the cooling composition in the final clause, "the pressure activated cooling composition *endothermically* activated . . . upon the application . . . of pressure . . . ." ('218 Patent col. 7:20–23, 7:35–38 (emphasis added).) Thus, the cooling composition is "endothermically activated" upon the application of pressure. In other words, "pressure" describes the cause of activation and "endothermic" describes the type of activation. Therefore, Defendant's argument that the term "activated" requires a chemical reaction is addressed by the Court in the following section and this Court construes the term "pressure activated" as "activated, at least in part, by pressure."

**(b) “endothermically activated” and “endothermically deactivated”**

Defendant suggests that when “endothermically activated” and “endothermically deactivated” are read in context, the meaning of the terms should be construed as claiming “a transformation from one type of substance to a different type of substance accompanied by the absorption of heat when pressure is applied and the release of heat when pressure is released.” (Joint Claim Construction Statement 14.) Defendant’s construction requires that the “activation” component be a reversible chemical reaction, which involves a transformation of the substance itself. (Def.’s Opening Br. 36–37.) Its position once again relies on the statements made by Plaintiff throughout the prosecution history.<sup>11</sup> These relied upon statements, however, do not support a construction requiring a chemical reaction be present in the invention.<sup>12</sup> The Court, therefore, is not convinced by the arguments presented by Defendant in support of its construction.

Plaintiff argues in favor of this Court construing “endothermically activated” and “endothermically deactivated” as “absorbs heat” and “releases heat,” respectively. (Joint Claim

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<sup>11</sup> Here, Defendant points to statements such as “[the prior art reference] does not disclose . . . the application and release of pressure to drive a chemical reaction [to decrease and increase in temperature].” (Def.’s Opening Br. 36 (citing Sept. 9, 2013 Response to Office Action 47).) Plaintiff supplied such statements in response to an obviousness rejection in light of the prior art cited by the examiner.

<sup>12</sup> See *Maze Innovations*, 2016 WL 7451629, at \*3–5 (rejecting the defendant’s argument that the claim language requires a chemical reaction in the context of the phrase “a pressure activated recharging cooling composition” because the plaintiff raised this only in the context of distinguishing the present invention from prior art, not to disavow a broader scope of the claimed invention where a chemical reaction is not required).

Construction Statement 14–15.) Plaintiff relies on the specification of the '218 Patent<sup>13</sup> as well as the understood meaning of “endothermic.”<sup>14</sup> Further, Plaintiff notes that:

the term “endothermic” refers to a process that provides for the cooling of an object by absorbing its heat. When a pet lays on the pad, the pad absorbs the pet’s heat, making it feel cooler; when the pet stops lying on the pad, the “reverse” of this cooling occurs as the composition returns to its original state . . . . When pressure is released as the object is removed from the cooling platform, the composition recharges by releasing the absorbed heat. Thus, the specification of the ['218 Patent] is clear that the “activation” and “deactivation” refer to the cooling and recharging processes provided for by the application and release of pressure.

(Pl.’s Opening Br. 22.) This Court agrees with Plaintiff’s proposed constructions.<sup>15</sup> A POSA would read the phrases “endothermically activated” and “endothermically deactivated” in the context of the intrinsic and extrinsic evidence provided to be “absorbs heat” and “releases heat,” respectively.

#### IV. **CONCLUSION**

For the reasons discussed above, the Court adopts the foregoing constructions of the claim terms. The Court will enter an Order consistent with this Memorandum Opinion.

s/ Michael A. Shipp  
**MICHAEL A. SHIPP**  
**UNITED STATES DISTRICT JUDGE**

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<sup>13</sup> The specification states that “the composition . . . can be activated by pressure, wherein the pressure of an object sitting on the cooling platform . . . activates the composition . . . triggering an endothermic process and subsequent cooling.” ('218 Patent col. 3:17–20.) This is the only instance where the term “endothermic” is used in the patent’s specification. (*See generally id.*)

<sup>14</sup> Plaintiff cites the Merriam Webster Dictionary definition of “endothermic” as “characterized or formed with absorption of heat.” (Pl.’s Opening Br. 22 n.9.)

<sup>15</sup> *See also Maze Innovations*, 2016 WL 7451629, at \*5–6 (adopting “absorbs heat” and “releases heat” for the terms “endothermically activated” and “endothermically deactivated” respectively); *European Home Design*, 2019 WL 1172069, at \*5 (adopting “absorbs heat” and “emits or releases heat” for “endothermically activated” and “endothermically deactivated” respectively); *Fine Promotions*, 2019 WL 6206577, at \*17 (“[T]he term ‘endothermic activation’ refers to the cooling process where the composition absorbs heat from the object. The complementary term, ‘endothermic deactivation’ refers to the state in which the endothermic activation (absorption) stops or is deactivated. When the absorption of heat stops, that heat is released.”).